# The Making Breaking and Breaking

of Yugoslavia and Its Impact on Health

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The creation of nation-states in Europe has generally been assumed to be intrinsic to modernization and to be irreversible. The disintegration of Czechoslovakia, the Soviet Union, and Yugoslavia demonstrates that the process is not irreversible. I argue that in the case of Yugoslavia, (1) disintegration was caused by the interaction between domestic policies with regard to nationalities and integration into the global economy and (2) the impact of the disintegration of the federation on health care and public health systems has been profound. Improving and converging measures of mortality before the collapse gave way to increasing disparities afterward.

The lesson is that processes of individual and social modernization do not result in improvements in health and well-being that are necessarily irreversible or shared equally.

SINCE THE LATE 1980S, THE

world has witnessed a phenomenon unique in modern European history. For the past several centuries, nation-states in Europe have grown stronger while incorporating large numbers of different peoples within their boundaries. The process has never been entirely successful, of course, as conflicts with incompletely assimilated peoples in the United Kingdom, Belgium, and Spain attest. Nonetheless, most scholars assumed that the building of nation-states was inevitable, irreversible, and part of the very

fabric of the process of modernization. And modernization meant secularization, the creation of national identities out of separate ethnic identities, rising living standards, and improvements in health.

This version of the growth of the nation-state is based on the western European experience, in which "the nation is a territorially bounded and self-governing collectivity, a collectivity shaped, indeed constituted by its territorial and political frame. Nationhood, on this view, is both conceptually and causally dependent on political territory."1 This was not the experience in central and eastern Europe, particularly "in the great multinational empires of the Ottomans, Hapsburgs, and Romanovs." There, the nation was not territorially based. It was an ethnocultural community, "typically a community of language."2 Members of the same ethnocultural community, or nationality, often lived scattered among other ethnocultural communities. In the states that emerged from the ruins of

the Ottoman, Hapsburg, and Romanov empires, nationalities continued to refer to such communities. This conception shaped the policies toward nationalities of the communist successor regimes of the Soviet Union and Yugoslavia and ultimately contributed to the collapse of both countries, thus demonstrating that the process of nation-state creation is not irreversible.

In this article, I suggest some of the reasons for the breakup of the Yugoslav federation and describe some of the healthrelated consequences. The association between political institutions and health care and public health institutions is inextricable, and the collapse of the former has profound consequences on the latter and on the health of the population. I argue that it was the economic crisis of the 1980s that let slip the dogs of war that tore apart the country. Nationalism, while real enough during all of Yugoslavia's brief history, became truly toxic only when economic collapse threatened.



# A BRIEF HISTORY OF THE **FORMER YUGOSLAVIA**

Throughout the 19th century, Croatia and Slovenia had been part of the Austro-Hungarian Empire. Serbia had gradually achieved independence from the Ottomans over the course of the 19th century. Bosnia, which had also been an Ottoman possession, was turned over to the Austro-Hungarian Empire as a result of the Treaty of Berlin in 1878.

The Ottoman Empire had by the end of the 19th century withdrawn from most of the Balkan Peninsula, retaining control of only Thrace and Macedonia. In the First Balkan War in 1912, the Serbs, Bulgarians, Montenegrins, and Greeks joined in a largely successful effort to drive the Turks from those remaining lands. Soon the victors fell to quarreling among themselves, and in 1913 the Second Balkan War erupted. This time, the major fighting occurred between the Serbs and the Bulgarians, with the Serbs emerging as the victors. The brutality, slaughter of civilians, and widespread destruction in each of the 2 wars horrified observers.3 The nationalist enthusiasms of which these wars were a manifestation were rife throughout the Balkans; a year later, in June 1914, they led to the assassination of the Hapsburg Archduke Franz Ferdinand and his wife in Sarajevo by Bosnian Serbs seeking the union of Bosnia with Serbia. The Austro-Hungarians held Serbia responsible and war erupted, which for the Serbs became a war to liberate all their South Slav brethren—Croats, Slovenes, and Serbs still under the domination of the Austro-Hungarian Empire.4 The result, after horrific bloodshed, was the

creation by the victorious allies of the Kingdom of the Serbs, Croats, and Slovenes, later to be renamed Yugoslavia.

All the regions that composed the new nation were for the most part agricultural. What industrial and commercial development had occurred was mainly in Croatia and Slovenia, which had long been part of the Austro-Hungarian Empire. When the new country was created by the Treaty of Versailles in 1918, Croatia and Slovenia went from being among the least developed parts of the empire to the most developed part of an undeveloped country. Rather than being able to trade in a large area without customs restrictions, they were now the commercial centers of a small, poor country

health leader, and the government was ineffective in providing preventive and curative health services as well as needed infrastructure. High taxes and declining agricultural prices during the depression years of the 1930s may have contributed to the peasants' hostility to the government and to their support for the Partisans during World War II, which was as much a civil war as a war against the German invaders.

That the Yugoslavs had fought their own war of liberation and had had their own communist revolution gave them a certain degree of independence in dealing with the Soviet Union and other communist nations. In particular, the Yugoslav leadership wished to develop Yugoslav industry rather than be entirely dependent on the

The association between political institutions and health care and public health institutions is inextricable, and the collapse of the former has profound consequences on the latter and on the health of the population.

whose political center was located in Belgrade and dominated by Serbs.<sup>5</sup> It is to the restriction of Croatian and Slovenian trading and commercial possibilities and to autarchic Serbian policies that much of the hostility between these republics right up to 1991 may be attributed.

The country remained largely undeveloped throughout the interwar years. Seventy-seven percent of the population were peasants. Illiteracy rates of those older than 10 ranged between 83.8% in Macedonia and 8.8% in Slovenia, with the national figure being 51.5% in 1921.6 Mortality and fertility were both high, epidemics were common despite innovative programs created by Andrija Stampar, the Croatian public

Soviet Union for manufactured goods. Conflict with the Soviet Union over this and other issues resulted in Yugoslavia's expulsion from the Comintern in 1947 and increasing economic and political isolation.7

As a result, Yugoslavs became increasingly critical first of Soviet foreign policy and then of its domestic policy, which they called "etatism," that is, centralized, bureaucratized government planning and control. In response to the threat of invasion by the Soviet Union, and to maintain the allegiance of the people, most of whom were noncommunists, a new form of socialism, called self-management, was developed. Self-management involved both decentralization and the inclu-

sion of workers in decisionmaking in the enterprises in which they worked.<sup>8</sup> There was growing openness toward, and dependence on, the West as trade with the Eastern Bloc declined. This took several forms, including foreign aid, foreign investment in Yugoslav enterprises, an increasingly market-oriented economy, and, increasingly through the 1970s, loans from commercial lenders.

The benefits of international integration were real, but also dangerous. Real incomes increased substantially from the early 1950s to the late 1970s but then began to fall precipitously as inflation destroyed the economy.9 The economic decline was attributable to severe deficits in the balance of payments, the result of increases in the price of oil and other imported goods beginning in the early 1970s; declining competitiveness of Yugoslav exports in the world market; and increasing resort to short-term commercial loans at high interest rates. Despite the establishment in 1979 of an economic stabilization program supported by the International Monetary Fund, inflation accelerated throughout the 1980s.<sup>10</sup> From 1970 to 1980, inflation had averaged 18.4% per year. It was between 85% and 105% annually in the early 1980s and reached 800% to 900% by the end of the decade; for the period 1979 to 1989, inflation averaged 123% annually.11

Complicating and exacerbating the economic crisis was the policy toward nationalities pursued by the Yugoslav government, one similar in many respects to, but less coercive and arbitrary than, the one pursued by the Soviet government. <sup>12</sup> Nationalities were

recognized as having cultural rights (to be educated in their own language, for instance). This was seen as a necessary but transitional phase-necessary to gain the loyalty of the many different nationalities, transitional because it was believed they would ultimately become one people. In both the Soviet Union and Yugoslavia, nationalities were territorially based in the different republics of the federation, but significant minorities were found in other republics-for instance, Serbs in Bosnia, Croatia, and the autonomous province of Kosovo (part of Serbia and the poorest region of Yugoslavia); Croatians in Bosnia; Albanians in Macedonia; and Hungarians in Vojvodina (also an autonomous province of Serbia and among the richest regions in the country). The notion that nationalities were ethnocultural communities was thus encouraged by government policy. Among other things, it meant that Serbia had an interest in the treatment of Serbs outside of Serbia, and that Croatia had an interest in the treatment of Croats in other republics.

The policy regarding nationalities also meant equalization across the republics; that is, a transfer of wealth from the rich to the poor republics.

"As in the Soviet Union, the equalization policy was most successful in culture," Vugacic and Zaslavsky write.

The promotion of local languages, the establishment of republican cultural institutions, and a general improvement in social services such as schooling and public health . . . contributed to the growth of an indigenous class of experts. As long as extensive economic growth and foreign credits could sustain such a policy, it helped co-opt ethnic middle

classes. One of the more harmful unintended consequences, however, has been the overproduction of experts whom the more market-oriented Yugoslav economy could not absorb. <sup>13</sup>

The overproduction of experts, particularly health workers, does not mean there were no health care needs left unmet but rather that the condition of the economy did not allow for their full employment. The result was a class of well-educated people dissatisfied with the limited opportunities afforded them.

It was in this context that first Slovenia and then Croatia seceded from Yugoslavia in 1991, for these were the 2 wealthiest republics. Their citizens had supported decentralization and liberalization and had long resented what they perceived to be the confiscatory taxes levied by the central government to pay for equalization, including development projects and services in the poor republics and in the autonomous province of Kosovo. While the taxes and redistributive policies they supported may have been tolerable when real incomes were rising, they became intolerable when the economy had fallen apart.

However, in addition to tension between republics there was the problem that Yugoslavia, like the Soviet Union, was a single-party state. There was no organized opposition party that crossed republic lines and could unite people once the dominant party had been discredited. Indeed, the policy with regard to nationalities had created local elites in every republic ready to assert their claims to independent nationhood. In both Serbia and Croatia, demagogic leaders arose whose appeal to their constituents was based on religious and ethnic loyalties that, once unleashed, could not be controlled.14

Thus, the history of Yugoslavia since 1945 embraces a period of rapid economic, political, and social modernization reflected in urban and industrial growth, improvements in literacy and economic well-being, changes in the traditional patriarchal family structure (the zadruga), moderation of ethnic hostilities, and integration into the international economy. However, in dialectical fashion, it also embraces a period of economic decline and intense ethnic reaction. In a very real sense, the route to the collapse of the Yugoslav federation, like the collapse of the Soviet federation, was paved by the policy toward nationalities that each had pursued, but it was precipitated by involvement in the global economy.

# **MORTALITY IN THE POST-WORLD WAR II ERA**

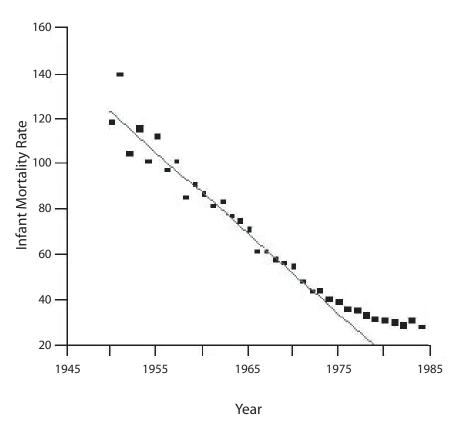
The redistributive policies pursued by the central government in Belgrade were partially effective: disparities in a variety of indicators of well-being persisted but diminished right into the 1980s. For example, school attendance and literacy increased all across the country, but by 1981 there were still major differences, with illiteracy ranging from 0.8% in Slovenia to 17.6% in Kosovo. 15 Similarly, there continued to be significant regional differences in income, in per capita expenditures on health and welfare, and in the distribution of physicians and hospital beds.16

There was also a substantial drop in infant mortality over most of the period from the early

1950s into the 1980s. Figure 1 displays the rates from 1955 through 1984 for the entire Yugoslav population. However, just as striking as the decline, is the stagnation that began some time in the early 1970s and became worse in the early 1980s.17 The slowing rate of decline occurred at the same time that inflation was increasing and rates of improvement of real income were slowing and then reversing. A similar pattern was observed in each of the republics and autonomous provinces (data not shown).

In addition to infants and children, the elderly were especially susceptible to the ill effects of economic decline and environmental hazards. Mortality rates of women aged 80 to 84 years increased from 129.1 per 1000 in 1977 to 132.5 per 1000 in 1981, while rates for men of the same age increased from 153.1 per 1000 to 162.9 per 1000 over the same period. For women and men aged 85 years and older, the increases were from 191.8 to 229.1 per 1000 and from 210.8 to 242.7 per 1000, respectively.18

Finally, a study in central Serbia showed that the rate of decline in deaths resulting from infectious diseases diminished significantly in the period 1987 to 1990 compared with the decline in previous years, attributable to the economic crisis of the 1980s.19 And a study in Bel-



Source. Statistical Yearbook of Yugoslavia (Belgrade: Savezni Zavod za Statistiku, various years).

FIGURE 1-Infant mortality rate (per 1000 live births) by year, Yugoslavia, 1950-1984.

grade showed an increase in allcause and cardiovascular disease mortality among both women and men from 1975 to 1989.<sup>20</sup>

However, even with inflation and declining real incomes, there was convergence among the republics, although improvements did not necessarily occur at the same rate. For example, infant mortality rates improved more rapidly in wealthy than poor regions, whereas the reverse was true of productive years of life lost.<sup>21</sup> Nonetheless, these analyses suggest that the decade before 1991, when Croatia and Slovenia seceded from the Yugoslav federation, was one of deteriorating health, just as was occurring in the Soviet Union before it collapsed.

This deterioration was attributable to the increasing inflation that began in the early 1970s and accelerated during the 1980s, to the erosion of real incomes, to the increased cost of imported pharmaceuticals and medical technologies, and to the withdrawal of government support from the health and social services sector, a condition imposed both by the economic crisis and by the International Monetary Fund when it rescheduled the nation's debt repayment. Nonetheless, no economic or political intervention was able to dampen the secessionist nationalist passions, which by the end of the 1980s had become so inflamed that war was inevitable.

TABLE 1-Hospital Use and Mortality in Serbia and Montenegro, 1985-1992

	1985	1988	1989	1990	1991	1992	
Hospital use and hospita	lized mortal	ity in Belgrade					
Hospitalization rate							
per 1000	111.9		104.0	103.5	107.3	96.9	
Hospitalization rate							
per 1000 aged ≥ 60 y	246.5		192.4	189.5	186.1	166.8	
Mortality rate per 1000							
hospitalized patients	28.3		25.8	29.9	31.7	36.4	
Mortality rate per 1000							
patients aged ≥60 y	74.0		71.5	78.9	86.3	96.6	
Mortality from all causes	s, per 100 00	00 population					
Belgrade							
All ages		816.3	826.8	889.7	925.2	1026.9	
≥65 y		5329.7	5349.3	5665.1	5828.3	6571.7	
Serbia and Montenegro							
All ages		953.8	963.2	942.9	975.8	1012.2	
≥65 y		6162.8	6289.7	6187.2	6336.9	6621.6	
Serbia							
All ages		972.9	984.2	961.9	996.7	1031.3	
≥65 y		6247.2	6367.0	6264.2	6415.6	6695.7	
Montenegro							
All ages		603.3	628.4	641.9	644.8	709.0	
≥65 y		4558.5	4810.7	4706.7	4815.2	5180.2	

# **HEALTH DURING THE THIRD BALKAN WAR**

So far, I have discussed the small but real health consequences of the political and economic changes that resulted in the secession of Croatia, Slovenia, Macedonia, and Bosnia-Herzegovina from the Yugoslav federation. Those secessions resulted in a war that matches in brutality the 2 previous Balkan wars of 1912 and 1913. What made these wars so brutal was that, like World War II, they were waged against civilians.

Clearly, even civilians in the noncombat zones suffered. In a series of studies, Serbian investigators in Belgrade described the consequences of United Nations (UN) sanctions on the health of the population of Serbia, and particularly of Belgrade.<sup>22</sup> Their data also measure the continuing collapse of the Yugoslav dinar, which had made imports of all sorts prohibitively expensive, as indeed they were even before the war. The hardships imposed by further economic collapse, as well, perhaps, as sanctions, has had an increased effect since the late 1980s, as the data in Table 1 illustrate.<sup>23</sup>

The top part of Table 1 shows that hospitalization rates declined significantly, particularly for people aged 60 years and older. At the same time, mortality rates of hospitalized patients increased, suggesting that only the very sick were being admitted, that health care worsened as a result of the inability to import needed medications, or both. The bottom part of Table 1 shows that for the total population of Serbia and Montenegro, and particularly for the elderly, mortality rates increased substantially from the

late 1980s through 1992. Again, it is not obvious from the data what the precise reasons aresanctions, the collapse of the dinar and the inability to purchase needed medications and vaccines, or a combination of both plus a variety of other factors. Another study, of 2 regions in Serbia in late 1993 and early 1994, showed that there had been a reduction in the use of a variety of preventive and curative services owing to an absence of supplies and an inability to pay for services that had previously been provided without charge.24

The economic collapse of the rump state of Yugoslavia had other health-related effects, for as the economy deteriorated, criminal activity increased. In the city of Belgrade, there was a 100% increase in homicides since the prewar period.25 Thus, even far from the combat zone, the mortality of noncombatants increased. But of course it was in the combat zone that the dangers were greatest, particularly when civilians were targeted by the warring parties.

Unlike contemporary civil wars in poorly developed nations, in which infectious diseases have been the leading cause of civilian death, in Bosnia, warrelated trauma was the leading cause. Between April 1992 and March 1993, 57% of all mortality in Sarajevo was caused by war injuries compared with 4% to 11% in Somalia between April 1992 and January 1993.26 In Sarajevo in April 1993, the crude monthly mortality rate was 2.9 per 1000, compared with 0.8 per 1000 in 1991. The incidence of infectious diseases, of course, increased in Bosnia owing to an inability to maintain water supplies and sewerage sys-

tems. Perinatal mortality and spontaneous abortions increased, and average birthweight decreased as a result of the inability to maintain prenatal services. Immunization levels declined among children, but no epidemics or evidence of mass starvation occurred.

Despite the deterioration of public health, trauma rather than infectious diseases remained the major cause of death,27 a direct consequence of the policy of ethnic cleansing that justified gang rapes by soldiers,28 the killing of noncombatants, and their forced transfer from one area to another. While all the warring parties engaged in such behavior, UN observers agreed that Bosnian Serbs caused the vast majority of deaths, as well as most of the forced movement of populations, rapes, and destruction of homes and cultural monuments.<sup>29</sup>

What evidence exists from previous European wars indicates that as a proportion of all war-related deaths, civilian deaths (defined as caused by wounds resulting from military equipment) have increased dramatically since the beginning of the 20th century. It is believed that occurrences of such deaths were low in 18th- and 19thcentury European wars. In World War I, civilians accounted for 19% of all deaths; in the Spanish Civil War, 50%; in World War II, 48%; in the Korean War, 34%; in the Vietnam War, 48%.30 In the Third Balkan War, the contribution of civilian deaths to the total may have been substantially more than 50%, as the data from Sarajevo suggest. Indeed, in Croatia in 1991 and 1992, the proportion was 64%.31 Such high and increasing rates are associated both with the increasing

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lethality of weapons and with a change in the morality of warfare, which became especially obvious during World War II. Civilians have increasingly been the targets of warfare to both terrorize and demoralize the population and to obliterate the enemy (whether combatant or noncombatant) from the face of the earth.

Thus, the available evidence indicates that the health of certain segments of the Yugoslav population had begun to worsen in the decade and a half before the war as the economy declined and that the deterioration of health continued during the war. There also have been measurable postwar health consequences of the terror and suffering visited upon noncombatants and combatants.32 These, significant in their own right, represent a continuing burden on, and challenge to, health care and public health systems. I turn, however, to some of the consequences that are not the direct result of war trauma to individuals.

# THE AFTERMATH OF WAR

Until the late 1980s, measures of well-being were converging among the republics and regions of Yugoslavia. The breakup of the country changed all that. In what is now the rump state of Yugoslavia, known as Serbia and Montenegro, income dropped by more than

50% from 1981 to 1999. In constant 1994 dinars, per capita income was 4820 dinars in 1981, 3894 dinars in 1991, and 1887 dinars in 1999.33

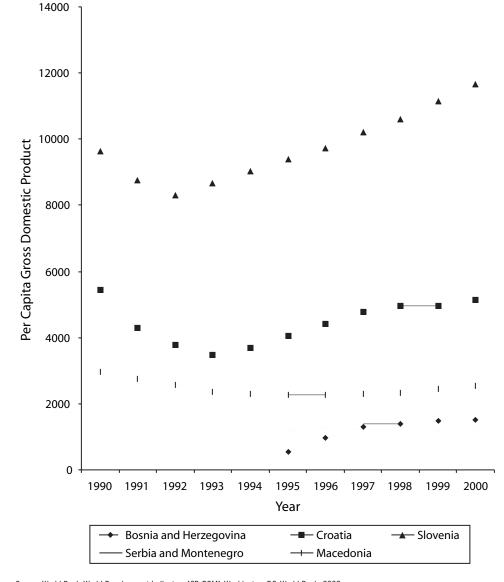
Figure 2 tells an equally dramatic story. Income declined or stagnated in Macedonia, Serbia and Montenegro, and Bosnia. In Croatia and Slovenia, where income was high to begin with,

it improved substantially after a decline in 1991 and 1992. Indeed, the improvement in Slovenia has been extraordinary. As a consequence of secession, war, and sanctions, there was dramatic divergence among the countries that composed the former Yugoslavia. Some got poorer, some stagnated, and others got richer.

Although life expectancy data from the 1990s are highly suspect owing to the turmoil of war and the vagaries of various reporting systems,34 Figure 3 tells roughly the same story as Figure 2. There was rapid convergence of life expectancy through the 1970s, equality and stagnation in the 1980s, and then substantial divergence in the 1990s, with Slovenia moving well ahead of the others.

The conflicts in the early 1990s did not occur on the territory of Serbia and Montenegro, having been limited to Slovenia, Croatia, and Bosnia-Herczegovina. However, in the late 1990s, fighting broke out in Kosovo, leading to the NATO bombing of Serbia. Thus, throughout the decade of the 1990s, Serbia and Montenegro experienced first economic collapse, exacerbated by UN and US sanctions, and then bombing. Only when President Slobodan Milosevic was removed from office in 2000 were the sanctions lifted, although the public health infrastructure remained underfunded and in disarray. It is estimated that sanctions had caused about 20% of the decline in the economy of Serbia and Montenegro.35

The crisis in Bosnia-Herzegovina was different. Fighting had been savage, with the loss of many civilian lives and the purposeful destruction of hospitals and other infrastructure. The Dayton Accords ended the fighting in 1995 and led to the creation of a state with 2 ethnic entities, the Bosnian-Croat Federation and the Republika Srpska (Serbian Republic), each governed separately. There are 13 different jurisdictions, each with its own constitution and with no coordination among them,36 an exam-



Source. World Bank. World Development Indicators [CD-ROM]. Washington, DC: World Bank; 2002.

FIGURE 2-Per capita gross domestic product in 1995 US dollars in countries of the former Yugoslavia, 1990-2000.

ple of balkanization if ever there was one.

After minimal fighting early in the war, Slovenia was left to its own devices. In Croatia, however, Serbs had held about a quarter of the territory and caused horrific damage and loss of life until expelled by Croatian troops in 1995. The Serbs fled to Serbia while hundreds of thousands of Croatian refugees from Bosnia-Herzegovina fled to Croatia. Hundreds of thousands of Kosovars also fled to Macedonia and Albania in 1999,37 and many Serbs living in Kosovo fled to central Serbia. Thus, compounding the death and destruction caused by the fighting were large population movements. All of this caused severe disruption throughout the former Yugoslavia, with the exception of Slovenia.

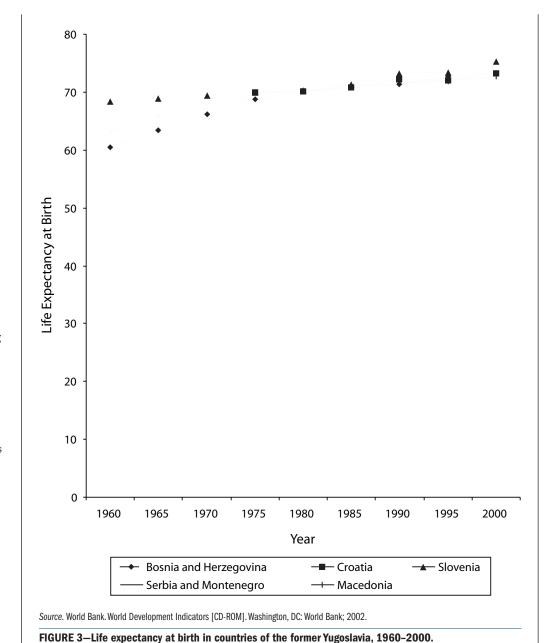
In all the former republics except Slovenia, economic decline, large movements of refugees, and the destruction of much of the health-related infrastructure have put great pressure on the health services, so much so that in every case user fees are being instituted or increased. But economic pressure is not all that accounts for the change. The collapse of socialism has meant that privatization of all varieties of enterprises, including health care, has proceeded more or less rapidly in all the former republics.<sup>38</sup> Undoubtedly, the fact that loans from the World Bank are being used to underwrite health system reform is also important, but the extent of the influence is not clear. What is clear is that the plans for reform, their rationale, and the criticisms of the previous system sound remarkably alike across all the republics.

# **HEALTH CARE SINCE** THE BREAKUP OF **YUGOSLAVIA**

When Yugoslavia split from the other Communist Bloc countries, it developed its own form of what was called self-managing socialism. This was meant to decentralize and democratize decisionmaking in both productive

enterprises and service institutions such as hospitals and health centers. Money for health care came from payroll taxes and was managed by social insurance institutions at the local level. Originally, agricultural workers were excluded, but gradually coverage became universal.

Before the breakup of the country, the effectiveness of the



system had been debated. One view was that decentralization had led to inefficient and wasteful use of resources, perpetuated inequalities among regions, and required greater central planning and control to be effective. Another view was that the dysfunctions of the system were the result of too much continuing control by the state, not too little.39 In general, however, the consensus appeared to be that the health care system did provide services, even if inefficiently, to people who would

covered by the state, "regardless of extent." "The greatest problem was the communist manner of financial management, which lasted for decades. Health services had no fixed prices and were available to everybody, without any financial control. The system was separated from other financial systems, especially financial inspections. Health care was a gift of communism to the people. It was forbidden to ask about its cost, although it was obvious that a very high price would have to be paid for it some day."40

sulted in worsening of the health of the poor.<sup>42</sup>

#### **LESSONS**

The story of Yugoslavia is at odds with the optimistic assumptions that are the legacy of the 19th-century ideas of nationalism, convergent modernization, and demographic and epidemiological progress of which we are the inheritors. Regarding mortality, since the late 18th century there clearly has been convergence between the less devel-

The reforms that have been widely instituted generally mandate a basic level of health services for everyone, with varying levels of co-payments, supplemented by private insurance for services that are not part of the compulsory scheme.

have otherwise been unable to afford them. Of course, many people who could afford to do so were able to manipulate the system to their advantage, often by paying additional fees to health care providers.

Since the breakup, commentators have been more nearly unanimous in their judgment of the previous system: it was, they assert, wasteful and corrupt. Services were essentially free and were abused by the populace. General practitioners had no inducements to treat most problems themselves, instead referring large numbers of patients to specialists whose services were invariably costly. There were no financial controls on the purchase of medications. "Salaries were fixed independently by workers of each health institution," leading to inequality among institutions but also to high levels of debt, which were

Those comments were made by the Croatian minister of health in 1994, but many others wrote similarly of the system as it existed before the breakup of the country.<sup>41</sup>

The reforms that have been widely instituted generally mandate a basic level of health services for everyone, with varying levels of co-payments, supplemented by private insurance for services that are not part of the compulsory scheme. The result in Croatia, where the consequences of the reforms have been studied most thoroughly, is dissatisfaction on the part of large segments of the public and high proportions of the incomes of poor and middleclass people being spent on health care that used to be free. This spending contributes to growing income inequality, but it is not yet clear whether the increasing cost of care has reoped and more developed regions of the world, even though in the 1970s and 1980s the rate of convergence diminished. 43

However, divergence in the future is a real possibility, and the story of Yugoslavia, like that of the Soviet Union, illustrates some of the reasons why. They have to do with the deteriorating situation that led up to secession and war and its consequences. In Yugoslavia, as in the Soviet Union and Czechoslovakia, the centripetal forces of political, economic, and military integration were counterbalanced by the centrifugal forces of devolution, nationalism, and ethnocultural selfdetermination, even in the presence of both institutional and individual "modernization."

As a federation, Yugoslavia after World War II worked well for more than 4 decades. It worked largely because it was

increasingly well integrated into the Western economy, so much so that shortly before the collapse of the country, membership in the European Community was under serious consideration. But that integration was also one of the sources of the collapse, for it was rising oil prices, unwise borrowing from commercial banks, and the failure of Yugoslav products to compete in the world markets that led to the balance of payments crisis. And it was the internal weaknesses of the federation, notably a single-party system of government and the pursuit of a policy that encouraged ethnocultural autonomy within the republics of the federation, that made it unable to withstand and survive the crisis. Indeed, it was the crisis that made those weaknesses at once obvious and fatal.

I have said that divergence in the well-being of people in the new countries that were once Yugoslavia is a distinct possibility. The fact that these newly independent nations are relatively small is not by itself significant, as the low mortality rates of small nations such as the Scandinavian countries and The Netherlands demonstrate. The more significant issue has to do with the great economic and health inequalities that characterized the republics when Yugoslavia was a federation and that will characterize the independent nations into which the federation has fragmented.

Federations are in part a response to the problems encountered by small, weak countries with common borders across which trade and populations move only with great difficulty and to the problems of defense that can be more effectively

solved in common than separately. Federations are not all the same, of course, but there are some problems with which they all must cope. Inevitably, there is not perfect equality among the constituent members of any federation, and just as inevitably there will be some redistribution of resources among them-what has been termed horizontal equalization. Along with the problem of vertical equalization (the imbalance between expenditures and revenues at the state and federal levels), this is a major issue they all face, and the rock upon which the Yugoslav federation foundered.

Horizontal equalization poses enormous challenges. On the one hand, federations generally are based on some sort of agreement about the minimum standards beneath which no province or state should fall, implying that some will be taxed more than is returned to them by the federal government and that those in need will receive more than they pay in taxes. On the other hand, if citizens in the relatively well-to-do provinces or states believe they are being unfairly taxed, they will attempt to redress the balance, in the most extreme case by secession.

The economic problem is exacerbated when great cultural differences separate the constituent states or republics. This separation is what happened in Yugoslavia and the Soviet Union. The irony is that the ethnocultural differences that characterized each of them were not the product of deep-seated hatreds that had never disappeared and never would. While national differences clearly existed within each federation, they were exacerbated by policies that each had

pursued as a means of keeping the state intact.

Secession may solve the problem for the well-to-do, although there is no assurance of that. It is likely to prove catastrophic for the poor states, republics, or provinces that are now poor countries without a reasonably assured source of foreign aid equivalent to the domestic aid they received when they were part of a federation. The result regarding health and welfare may very well be worsening conditions for the poor new nations and increasing disparities with the well-to-do nations where once there was increasing similarity.

The lesson of this story is that the convergence of health status is not inevitable. Much depends on the continued existence of states that are able to redistribute resources from wealthy to poor regions and populations. That in turn depends on economic stability at a minimum and preferably growth as well as egalitarian policies to which the vast majority of citizens subscribe. To the degree that ethnic and cultural differences influence resistance to such policies, fragmentation as in Yugoslavia and the Soviet Union is a distinct possibility and with it increasing disparities between the relatively well-off and the poor. ■

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#### **Endnotes**

- 1. R. Brubaker, Nationalism Reframed: Nationhood and the National Question in the New Europe (Cambridge: Cambridge University Press, 1996), 34.
- Ibid 35
- Carnegie Endowment for International Peace, The Other Balkan Wars: A 1913 Carnegie Endowment Inquiry in Retrospect With a New Introduction and Reflections on the Present Conflict (Washington, DC: Brookings Institution, 1993). See especially the Introduction by George F. Kennan. The report provides no data on the number of civilians killed, but it may have been larger than the number of soldiers killed. There is no way to be certain
- J. Tomasevich, Peasants, Politics, and Economic Change in Yugoslavia (Stanford, Calif: Stanford University Press, 1955), 216-217.
- R. Trouton, Peasant Renaissance in Yugoslavia, 1900-1950 (London: Routledge and Kegan Paul Ltd, 1952); R. Bicanic, Economic Policy in Socialist Yugoslavia (Cambridge, England: Cambridge University Press, 1973); S. J. Kunitz, "Health Care and Workers' Self-Management in Yugoslavia," International Journal of Health Services 9 (1979): 521-537.
- Kunitz, "Health Care," 522; I Tomasevich Peasants 198
- Kunitz, "Health Care," 522; A. R. Johnson, The Transformation of Communist Ideology: The Yugoslav Case, 1945-1953 (Cambridge: MIT Press,
- Kunitz, "Health Care," 523; B. Denitch, The Legitimation of a Revolution (New Haven, Conn: Yale University Press, 1976); R. Supek, "Problems and Perspectives of Workers' Self-Management in Yugoslavia," in Yugoslav Workers' Self-Management, ed. M. J. Broekmeyer (Dordrecht, Netherlands: D. Reidel Publishing Company, 1970).
- Statistical Yearbook of Yugoslavia, vol 27 and 31 [in Serbo-Croatian] (Belgrade: Savezni Zavod za Statistiku, 1980 and 1984)
- 10. World Bank, Yugoslavia: Adjustment Policies and Development Perspectives (Washington, DC: International

- Bank for Reconstruction and Development/World Bank, 1983).
- 11. Much of the detail provided in these paragraphs is from S. J. Kunitz, S. Simic, and C. L. Odoroff, "Infant Mortality and Economic Instability in Yugoslavia," Social Science and Medicine 24 (1987): 953-960. The data on inflation during the decades 1970-1980 and 1979-1989 are from The World Bank, World Development Report: Investing in Health (New York: Oxford University Press, 1993). The figures for the end of the decade are from S. P. Ramet, Nationalism and Federalism in Yugoslavia, 1962-1991 (Bloomington: Indiana University Press, 1992), 239. See also J. R. Lampe, Yugoslavia as History: Twice There Was a Nation, 2nd ed. (Cambridge: Cambridge University Press. 2000).
- 12. V. Vugacic and V. Zaslavsky, "The Causes of Disintegration in the USSR and Yugoslavia," Telos 88 (1991): 120 - 140.
- 13. Ibid., 124.
- 14. For useful histories of this period, see B. Denitch, Limits and Possibilities: The Crisis of Yugoslav Socialism and State Socialist Systems (Minneapolis: University of Minnesota Press, 1990); B. Denitch, Ethnic Nationalism: The Tragic Death of Yugoslavia (Minneapolis: University of Minnesota Press, 1994); M. Glenny, The Fall of Yugoslavia: The Third Balkan War (New York: Penguin Books, 1992)
- 15. Statistical Yearbook of Yugoslavia, vol 31. See also M. Mastilica, "Health and Social Inequities in Yugoslavia," Social Science and Medicine 31(1990): 405-412
- 16. S. J. Kunitz, "The Recruitment, Training, and Distribution of Physicians in Yugoslavia," International Journal of Health Services 10 (1980): 587-609.
- 17. I do not have yearly infant mortality rates for subsequent years. There is some evidence that the rate did decline in subsequent years, from 28.9 per 1000 in 1984 to 27.1 in 1986 and 21 in 1989. The 1986 figure is from Mastilica, "Health and Social Inequities in Yugoslavia," Table 2. The 1989 figure is from World Development Report, 1993, Table 28; Kunitz, Simic, and Odoroff, "Infant Mortality."
- 18. Statistical Yearbook of Yugoslavia, vol 31, 120.
- 19. D. Vlajinac, J. M. Marinkovic, N. I. Kocev, et al., "Infectious Disease Mortality in Central Serbia," Journal of Epidemiology and Community Health 51 (1997): 172-174. See also M. E. Black, "Letter From Serbia and Montenegro:

- Collapsing Health Care in Serbia and Montenegro," *British Medical Journal* 307 (1993): 1135–1137.
- 20. H. D. Vlajinac, B. J. Adanja, M. S. Jarebinski, and S. B. Sipetic, "Cardiovascular Disease Mortality in Belgrade: Trends From 1975–89," *Journal of Epidemiology and Community Health* 48 (1994): 254–257.
- 21. J. Ananijevic-Pandey, "Premature Mortality in Former Yugoslavia," *European Journal of Epidemiology* 10 (1994): 339–341.
- 22. The Impact of UN Security Council Sanctions on the Health of the Population of FR Yugoslavia (Belgrade: Federal Ministry for Labour, Health and Social Policy, Federal Institute for Public Health. 1993).
- 23. N. Vojvodic, G. Sevo, Z. Dimitrijevic, L. Zikic, B. Tomasek, and B. Raspopovic, "Health State and Health Care of the Elderly Population in Yugoslavia Under the Sanctions Imposed by the United Nations Security Council," in Impact of UN Security Council Sanctions, 39.
- 24. B. Legetic, D. Jakovljevic, J. Marinkovic, O. Nicifarovic, and D. Stanisavljevic, "Health Care Delivery and the Status of the Population's Health in the Current Crisis in Former Yugoslavia Using EPI-Design Methodology," *International Journal of Epidemiology* 25 (1995): 341–348.
- 25. Y. Chazan, "Teenage Killers Flock to Join the Belgrade Mafia," *Guardian Weekly*, November 27, 1994, 3.
- 26. "Status of Public Health—Bosnia and Herzegovina, August—September 1993," MMWR Morbidity and Mortality Weekly Report 42 (1993): 973–982.
- 27. M. Aboutanos and S.P. Baker, "Wartime Civilian Injuries: Epidemiology and Intervention Strategies," Journal of Trauma, Injury, Infection, and Critical Care 43 (1997): 719-726; M. Rukovansjki, "Spinal Cord Injuries Caused by Missile Weapons in the Croatian War," Journal of Trauma, Injury, Infection, and Critical Care 40 (supplement) (1996): 189S-192S; P. B. Spiegel and P. Salama, "War and Mortality in Kosovo, 1998-99: An Epidemiological Testimony," Lancet 2000 (355): 2204-2209; P. Salama, P. Spiegel, M. Van Dyke, L. Phelps, and C. Wilkinson, "Mental Health and Nutritional Status Among the Adult Serbian Minority in Kosovo," Journal of the American Medical Association 284 (2000): 578-584; J. Terzic, J. Mestrovic, Z. Dogas, D. Furlan, and M. Biocic, "Children War Casualties During the 1991-1995 Wars in Croatia and Bosnia and Herzegovina," Croatian

- Medical Journal 42 (2001): 156–160; I. Suljevic and I. Surkovic, "Medical Aspects of the Mass-Scale Civilian Casualties at Sarajevo Markale Market on August 28, 1995: Triage, Resuscitation, and Treatment," Croatian Medical Journal 43 (2002): 209–212.
- 28. S. Swiss and J.E. Giller, "Rape as a Crime of War," *Journal of the American Medical Association* 270 (1993): 612–615
- Final Report of the Commission of Experts Established Pursuant to Security Council Resolution 780 (1992), publication S/1994/674 (New York: United Nations, 27 May 1994).
- 30. R. M. Garfield and A. I. Neugut, "Epidemiologic Analysis of Warfare: A Historical Review," *Journal of the American Medical Association* 266 (1991): 688–692.
- 31. M. Kuzman, B. Tomic, R. Stefanovic, M. Ljubovic, D. Katalinic, and U. Rodin, "Fatalities of War in Croatia, 1991 and 1992," *Journal of the American Medical Association* 270 (1993): 626–628.
- 32. R. F. Mollica, K. McInnes, N. Sarajlic, J. Lavelle, I. Sarajlic, and M. P Massagli, "Disability Associated With Psychiatric Comorbidity and Health Status in Bosnian Refugees Living in Croatia," Journal of the American Medical Association 282 (1999): 433-439; R. F. Mollica, N. Sarajlic, M. Chernoff, J. Lavelle, I. S. Vukovic, and M. P. Massagli, "Longitudinal Study of Psychiatric Symptoms, Disability, Mortality, and Emigration Among Bosnian Refugees," Journal of the American Medical Association 286 (2001): 546-554; R. Gregurek, L. Pavic, D. Vuger-Kovacic, et al., "Increase of Frequency of Post-Traumatic Stress Disorder in Disabled War Veterans During Prolonged Stay in a Rehabilitation Hospital," Croatian Medical Journal 42 (2001): 161-164; A. Barath, "Psychological Status of Sarajevo Children After War: 1999-2000 Survey," Croatian Medical Journal 43 (2002): 213-220; A. Barath, "Children's Well-Being After the War in Kosovo: Survey in 2000," Croatian Medical Journal 43 (2002): 199-208; A. Babic-Banaszak, L. Kovacic, L. Kovacevic, G. Vuletic, A. Mujkic, and Z. Ebling, "Impact of War on Health Related Quality of Life in Croatia: Population Study," Croatian Medical Journal 43 (2002): 396-402; B. L. Cardozo, A. Vergara, F. Agani, and C.A. Gotway, "Mental Health, Social Functioning, and Attitudes of Kosovar Albanians Following the War in Kosovo," Journal of the American Medical Association 284 (2000): 569-577; R. Horton, "Croatia and Bosnia: The Imprints of War, I: Consequences," Lancet 353

- (1999): 2139–2144; R. Horton, "Croatia and Bosnia: The Imprints of War, II: Restoration," *Lancet* 253 (1999): 2223–2228
- 33. Calculated from the *Statistical Yearbook of Yugoslavia*, various years.
- 34. I. Bozecevic, S. Oreskovic, R. Stevanovic, U. Rodin, E. Nolte, and M. McKee, "What Is Happening to the Health of the Croatian Population?" *Croatian Medical Journal* 42 (2001): 601–605
- 35. R. Garfield. Economic Sanctions. Health, and Welfare in the Federal Republic of Yugoslavia 1990-2000 (Belgrade: UNICEF, 2001). See also O. Tosic and E. Jefferys, Serbia. Country Briefing Paper (London: Health Systems Resource Centre, Department for International Development, June 2001). For a description of one aspect of the disarray of the public health system, see M. Djordjevic, M. Bacic, M. Tericervic, et al., "Social, Political, and Economic Factors Responsible for the Reemergence of Trichinellosis in Serbia: A Case Study," Journal of Parasitology 89 (2003): 226-231.
- 36. B. Rechel and M. McKee, "Improving Health in South-East Europe: The Need for Sustained Investment," unpublished draft, European Centre on Health of Societies in Transition, London School of Hygiene and Tropical Medicine, London, 2 May 2003.
- 37. R. Kondaj, "Management of Refugee Crisis in Albania During the 1999 Kosovo Conflict," Croatian Medical Journal 43 (2002): 190–194; D. Donev, S. Onceva, and I. Gligorov, "Refugees Crisis in Macedonia During the Kosovo Conflict in 1999," *Croatian Medical Journal* 43 (2002): 184–189.
- 38. I. Jeffries, The Former Yugoslavia at the Turn of the Twenty-First Century: A Guide to the Economies in Transition (New York: Routledge, 2002).
- 39. D. E. Parmelee, "Whither the State in Yugoslav Health Care?" Social Science and Medicine 21 (1985): 719–728; V. Milanovic and V. Stambolovic, "The Prescription for Yugoslav Medicine," Social Science and Medicine 21 (1985): 730–732. See also M. Saric and V.G. Rodwin, "The Once and Future Health System in the Former Yugoslavia: Myths and Realities," Journal of Public Health Policy 14 (1993): 220–237.
- 40. A. Hebrang, "Reorganization of the Croatian Health Care System," *Croatian Medical Journal* 35 (1994): 130–136.
- 41. S. Oreskovic, "Health System Reorganization in Croatia in the Light of Major Reform Tendencies in OECD Countries," Croatian Medical Journal 36

- (1995): 47-54; L. Kovacic and Z. Sosic, "Organization of Health Care in Croatia: Needs and Priorities," Croatian Medical Journal 39 (1998): 249-255; S. Turek, "Reform of Health Insurance in Croatia," Croatian Medical Journal 40 (1999): 143-151; M. Markota, I. Svab, K. Klemeneie, and T. Albreht, "Slovenian Experience in Health Care Reform," Croatian Medical Journal 40 (1999): 190-194; B. Ljubic, B. Hrabac, and Z. Rebac, "Reform of Health Insurance in the Federation of Bosnia and Herzegovina," Croatian Medical Journal 40 (1999): 160-165; B. Hrabac, B. Ljubic, and I. Bagaric, "Basic Package of Health Entitlements and Solidarity in the Federation of Bosnia and Herzegovina," Croatian Medical Journal 41 (2000): 287-293; D.M. Donev, "Health Insurance System in the Republic of Macedonia," Croatian Medical Journal 40 (1999): 175-180; J. C. Langenbrunner, "Supplemental Health Insurance: Did Croatia Miss an Opportunity?" Croatian Medical Journal 43 (2002): 403-407; S. Simic, V. Bjegovic, P. Jelaca, J. Marinkovic, R. Kosanovic, and D. Mladenovic, Basic Principles for the Reform of the Health Care System in the Republic of Serbia: Policy Paper (Belgrade: Center for Policy Studies, 2002).
- 42. M.S. Chen and M. Mastilica, "Health Care Reform in Croatia: For Better or for Worse?" American Journal of Public Health 88 (1998): 1156-1160; M. Mastilica and M.S. Chen. "Health Care Reform in Croatia: The Consumers' Perspective," Croatian Medical Journal 39 (1998): 256-266; M. Mastilica and J. Bozikov, "Out-of-Pocket Payments for Health Care in Croatia: Implications for Equity," Croatian Medical Journal 40 (1999): 152-159; M. Mastilica and S. Babic-Bosanac, "Citizens' Views on Health Insurance in Croatia," Croatian Medical Journal 43 (2002): 417-424; D. Bosnjak and A. Marusic, "Croatia: Legal Regulation of Doctors," Lancet 356 (2000): 1349-1350; M.C. Istenic, "Privatization of Health Care in Slovenia," Croatian Medical Journal 39 (1998): 288-297.
- 43. S. J. Kunitz and S. L. Engerman, "The Ranks of Death: Secular Trends in Income and Mortality," *Health Transition Review* 2 (supplement) (1992): 29–46. For later decades, see D.R. Gwatkin, "Indications of Change in Developing Country Mortality Trends: The End of an Era?" *Population and Development Review* 6 (1980): 615–644.